Pareidolia

A Visual Inquiry into the Perception of Ambiguous Images

By

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Declaration of Originality

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ABSTRACT

This project explores the creative dynamics of visual perception through the phenomenon of *pareidolia.* Pareidolia manifests itself in recognisable shapes perceived in random stimuli and is a process which resists both adequate explanation and interpretation. The study explores some of the many cognitive and visual processes involved in the phenomenon, and interprets the findings in a materialistic form. Although pareidolia is often viewed as an illusion or misinterpretation of ambiguous stimuli, I believe it is an innate process which is allied to both imagination and human survival. This study explores the concept that it is a dual reality which brings into question established perceptions of reality.

Utilising the medium of painting, I aim to create a body of work which reveals my interpretive response to random stimuli which contain pareidolian cues. The works and observations are a subjective analysis of ambiguous provocations which also bond cognitive and visual percepts to a material platform. The works reflect subconscious interactions with my perceptual set and reveal the vast array of responses which can emerge from seemingly featureless visual stimuli. From the figurative to the abstract, from the decorative to the simplistic, pareidolia evokes endless potential for artistic investigation. The project documents the progression of paintings, from initial interpretation, to the conceptual and visual closure of the percept. Three distinct phases emerge, figurative, ambiguous and abstract/pattern, all seemingly intertwined in degrees of shapeshifting.

Within this context, the study examines artists who have utilised numerous aspects of this phenomenon in both subtle and overt guises. Leonardo da Vinci, Giuseppe Arcimboldo, Alexander Cozens, Justinus Kerner and Max Ernst are representative of artists who have pioneered new developments in this genre. In an Australian context, the work of Russell Drysdale and Reinis Zusters exhibit unique aspects of pareidolia which respond to their vision of the Australian landscape.

ACKNOWLEDGEMENTS

I wish to acknowledge my sincere gratitude for the academic guidance and assistance provided by my supervisors, the late Dr Sue Henderson, Dr Troy Ruffels and Penny Mason. Their help and support was invaluable, as was that given by the many fellow students who shared this journey.

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INTRODUCTION

‘The greatest optical illusion of all is to believe that an image has only one interpretation’ (Sarcone 2009, p. 11).

Artist and author of illusionary works of art, Gianni Sarcone, offers us precautionary counsel when we seek to comprehend a visual image. Sarcone’s statement invites us to question our perception of visual reality and how those perceptions are shaped. The phenomenon of pareidolia exemplifies an oddity in our visual processes which challenges the interpretation we give to such ambiguous experiences.

This project is an investigation of a phenomenon which has repositioned my concept of visual reality and how the world is perceived. By utilising the vehicle of pareidolia I aim to understand the cognitive processes which determine how I interpret visual stimuli and specifically the ambiguous and seemingly unexplainable visual imagery which manifests itself within the phenomenon. Through the medium of painting I aim to produce a practical interpretation of the more ambiguous and indeterminate visual cues which occur in randomly occurring stimuli. This exegesis will document the theoretical development of the investigation and discuss the practical decisions taken to interpret the random stimuli.

Figure 1: Richard Hodgetts, *Clouds*, 2015, digital photograph

Pareidolia is a phenomenon which is experienced by most people, whereby faces and other recognisable shapes seem to appear in clouds, rock formations and other random stimuli (Figure 1).

This project considers the question: Is there an explanation for the existence of such a visually imaginative phenomenon and, if so, can my artmaking gain advantage by its creative potential?

Throughout history, pareidolia has been observed and used regularly in the service of religious, political and creative practitioners for a multitude of purposes. In the 15th century, Leonardo da Vinci alerted us to this phenomenon and its relationship to visual perception. His observations, as translated by Edward McCurdy, sought to inspire artists to be more inquiring and inventive with their environment:

> I will not refrain from setting among those precepts a new device for consideration which, although it may appear trivial and almost ludicrous, is nevertheless of great utility in arousing the mind to various inventions. And this is that if you look at any walls spotted with various stains or with a mixture of different kinds of stones, if you are about to invent some scene you will be able to see in it a resemblance to various different landscapes adorned with mountains, rivers, rocks, tress, plains, wide valleys and various groups of hills. You will also be able to see divers combats and figures in quick movement, and strange expressions of faces, and outlandish costumes, and an infinite number of things which you can reduce into separate and well-conceived forms. With such walls and blends of different stones it comes about as it does with the sound of bells, in whose clanging you may discover every name and word you can imagine (da Vinci in McCurdy 1958, p. 873).

Leonardo da Vinci was acknowledging the existence of pareidolia and opening up a debate about the way in which we perceive reality. He was revealing to artists a new way of observing and interpreting the visual world as well as encouraging artists to engage their imagination and look beyond the obvious. He was introducing the concept of visual closure which will be discussed in Chapter 1.

Today, artists may ponder its relevance in a world of digitally inspired technologies which are reshaping our concept of visual reality. Historically, artists have successfully survived challenges by new technologies, as evidenced by the challenge presented by photography when it was first introduced in the 19th century. Leonardo's message encourages the awakening of the artist's imagination and innate abilities to explore new ways of perceiving their world.

Through the medium of painting, this project responds to these observations and gives insight as to how we visually interpret our world.

Pareidolia employs multiple cognitive processes such as imagination, closure, perceptual set, perceptual reversal and ambiguity. It is a unique component of the human visualisation system and is

often associated with elements of illusion. Art historian Ernst Gombrich suggested that there was no rigid distinction between perception and illusion: ‘Perception employs all its resources to weed out harmful illusions, but it may sometimes fail to “disprove” a false hypothesis for instance, when it has to deal with illusionist works of art’ (Gombrich 1977).

Illusion is a large and complex phenomenon within itself, which I define as distinct from pareidolia. The intent or raison d'être of illusion is to deceive or trick whereas I interpret pareidolia having a more symbolic or duality of representation element. Both illusion and pareidolia share elements of visual ambiguity and suggestion, and thus I discuss illusion in the examination of works by other artists that have informed my research. Nonetheless, reflective analysis of my own work identifies pareidolia as a distinct phenomenon with implications for creative practice.

Chapter 1, *Pareidolia*, provides a description of pareidolia and how it manifests itself. It also investigates and identifies cognitive processes which relate to pareidolia and other concepts of visual reality. Included is a brief overview of philosophical theories as they apply to visual perception and where they may be influential in my work. This investigation also considers pareidolia’s possible importance in human survival and the part it may have played as a catalyst for the inspiration of early humans to create art.

Chapter 2, *Antecedents and Proponents*, examines a selection of artists who have utilised this phenomenon and compares similarities, differences and techniques where they may relate to my own work. Pioneers in this area include Leonardo da Vinci, Giuseppe Arcimboldo, Alexander Cozens, Justinus Kerner, Salvador Dali, Russell Drysdale and Reinis Zusters.

Chapter 3, *The Process and Works*, documents and records the development of the works with emphasis on providing visual evidence of the interpretative process. Due to the nature of the subject, this project is largely a self-analysis of my personal responses, visually and cognitively, and therefore relies extensively upon my personal and subjective observations. What ultimately eventuates is a distinct bias towards shapeshifting, which evolves over three distinct phases.

In this study I have allowed the painting materials to suggest to me hidden forms and patterns, which are manifestations of unique pareidolian projections. The ways in which I interpret these percepts are undoubtedly a union of learned skills, imagination, and a subconscious process which endeavours to make meaning of perceived stimuli. It should be understood that I consider the phenomenon of

pareidolia only exists for those seconds leading up to the point of visualising the suggestive imagery. After visualisation comes interpretation, which can be limited to the storing in memory of these experiences or, as this study attempts, it can be brought to a concrete stage. The artworks themselves are not pareidolia, however they can suggest pareidolian images to the viewer.

It is within the viewer's imagination to recognise the images I may produce as well as interpret their own visual apparitions. This project strives to document my experiences in interpreting these visual cues and to give weight to Leonardo's observations of a phenomenon which can help expand the artist's imagination.

CHAPTER 1: PAREIDOLIA

While its function is difficult to establish, pareidolia appears to have a significant role within a creative context, where it expressly excites the imagination and challenges our concept of reality. Dissecting its suggestive traits can better inform one's understanding of its component parts and also give some justification to the painting processes undertaken in this project.

Derived from the Greek words *para* (beside, instead) and *eidolon* (image), pareidolia is often described as a faulty image being perceived by the human eye. It is also a type of apophenia which is the experience of seeing patterns or connections in sometimes meaningless data and random sounds or images. These experiences have often been an important element in many cultural traditions and practices.

The phenomenon presents itself in anthropotheism, where gods or deities are perceived in the image of man. Throughout early and later civilisations, shamans, witch doctors, medicine men, oracles, psychics, prophets and visionaries observed and utilised human images appearing in smoke, landforms, star patterns and natural phenomena to explain and foretell events. Similarly, anthropomorphism is the term which describes the act of giving or attributing human traits and shapes to non-human objects for artistic, storytelling or geo-descriptive purposes which have obvious pareidolian overtones. Having connections within so many cognitive and visual processes, it is not easy to see pareidolia as one distinctive element.

Today, anthropotheism may have lost credence in our cultural practices and traditions, but if we look at aspects of our daily lives we may find that some aspects and traditions survive. As an example, to aid navigation and spatial orientation, pareidolia has always encouraged me to give names to elements in my environment, as evidenced in the images of *Eagle Rock Perceived* (Figure 2). For me, this rock has lost its presence solely as a rock, and has become a receptacle of references and memories. Its interpretation is forever changing, dependent upon the context in which it is encountered. An elasticity in my perception of imagery now occurs, forever being expanded with each new experience.

Figure 2: Richard Hodgetts, *Eagle Rock Perceived*, 2012, digital photograph

A less overt example of how I interpret pareidolian images is demonstrated in the images of *Franz Hals Perceived* (Figure 3). A close-up of the stains in a log of wood reveal what I perceive to be an image of a face. In an endeavour to resolve the ambiguous imagery, my cognitive processes have responded by retrieving stored memories of a Franz Hals portrait in order to make a best-fit meaning to the percept. Conversely, the viewer may see other shapes, such as a dog, for we all activate different processes to give meaning to visual imagery.

Once encountered, this process of viewing ambiguous stimuli sensitises one to seeing familiar objects, much like when we buy a new car and we become suddenly aware of the same car type everywhere.

Figure 3: Richard Hodgetts, *Franz Hals Perceived*, 2015, digital photograph (detail)

Gianni Sarcone, whose work investigates visual perception through illusion, also acknowledges pareidolia as a significant element in the way generations have viewed the world:

> … the discovery of religious figures and faces in clouds, nature or even in everyday objects is something very common to the human nature, and most people don't interpret it as an act of creation or a construct of the mind but as an illumination: something sacred is revealed before their eyes, leading them to believe that there is another realm of reality corresponding to the physical. I think, pareidolia is at the origin of religions (Sarcone 2016).

In certain societies, pareidolian images in nature could have supernatural meaning and using them in religious art provides strong prophetic reinforcement. Artists often utilised idolatry imagery in religious works for reasons Burke proposes: '…images play a part in creating the experience of the sacred … and images were a means of "indoctrination" ... and the communication of religious doctrines' (Burke 2001, pp. 46-48).

For example, in his portrayal of *St Sebastian* (Figure 4), Italian painter Andrea Mantegna (1431–1506) has utilised a pareidolian reference to suggest the existence of a spiritual presence and to propose validation of a religious narrative.

For illiterate people, images were a language without borders, a picture telling a myriad of stories, some extolling higher concepts and visions. Pope Gregory the Great endorsed the use of imagery to educate when he said: 'We will not err if we show invisible things by means of visible ones' (Burke 2001, p. 46).

Figure 4: Andrea Mantegna, *St Sebastian* (detail), 1459, paint on panel, 68cm x 30cm
www.hyperallergic.com/40127/giotto-assisi-

Pareidolia reveals many shapes but the face is the most common shape to be recognised. A search of Google Images will deliver numerous examples of common objects which we recognise as having facial characteristics (Figure 5). Less overt and more surreal are faces observable in my experiments with the mirror imaging of photographs (Figure 6). The works of Victor Hugo, Justinus Kerner and Max Ernst, which are discussed later in this paper, also explore aspects of symmetry and the shapes it can suggest.

Figure 5: Richard Hodgetts, *Google Images Montage*, 2016

Figure 6: Richard Hodgetts, *Faces Compilation*, 2016, digital images

The importance of recognising faces in pareidolian patterns appears to reflect an inbuilt survival process. It has been the focus of many psychological studies related to face recognition which have revealed much about how infants perceive and process information. One recent study has found that: 'Face perception is an automatic, rapid and subconscious process, already present in human newborns, who preferentially orient towards simple schematic face-like patterns'(Hadjikhani et al. 2009).

The critical piece of anatomy we use to identify friend or foe, animal or human, is the face. Through experience, we learn to catorgorise these faces into groups from which pareidolia can initiate an instant response.

Carl Sagan supports this observation, stating:

> '... as soon as the infant can see, it recognises faces, and we now know that this skill is hardwired in our brains. Those infants who a million years ago were unable to recognise a face smiled back less, were less likely to win the hearts of their parents and less likely to survive. These days nearly every infant is quick to identify a human face, and to respond with a goony grin' (Sagan 1995, p. 45).

Sagan goes on to say that the pattern recognition machinery of humans, being so efficient, extracts faces from clutter where there are none such, citing the 'The Man in the Moon', 'The Devil's Head' in North Carolina, and other common examples.

I consider this initial recognition of images in stimuli as 'pareidolia', the innate response to something vaguely recognisable but out of context. Illusion is just one label given to the process of image building, and the uses which humans have made of these manifestations have been aluded to previously.

Rudolph Arnheim also provides support of an inherited skill where he says: 'Vision is selective … the senses evolved as biological aids for survival … that made the difference between the enhancement and the impediment of life' (Arnheim 1974, p. 19). The element of a neural hardwiring leads me to conclude that there must be a visual/cognitive process that ignites this ability, and that process, for whatever reason, could activate the pareidolian phenomenon.

Conversely, to nullify pareidolia's strengths, creatures such as Smith's dwarf chameleon use deception by adopting camouflage or presenting ambiguous or illusionary patterns to trick the eye. For recognition of friends or foe, humans have used uniforms and environmental patterning to conceal assets. Adopting this approach, Chinese artist Liu Bolin uses camouflage to hide figures in and against background patterns and challenges the viewer's ability to delineate between two realities (Figure 7). This also references a survival process which largely seeks to thwart any pareidolian ability to recognise shapes.

Figure 7: Liu Bolin, *Camouflage 9*, 2009, digital image
www.toxel.com/inspiration/2009/10/04/camouflage-art-by-liu-bolin/

In accepting Carl Sagan's belief that humans are hard wired to recognise danger for their survival, I infer that pareidolia triggers that first response to make instant decisions, a kind of 'gut feeling' or intuition that currently eludes scientific explanation. It alerts me to the fleeting snapshots of visual apparitions either in the landscape, on canvas or on paper.

Often our peripheral vision is the first responder to an out-of-context scenario. It may alert us to a child running towards our car or a dangerous animal moving in the forest. Pareidolia and peripheral vision work together to allow us to respond to unfamiliar shapes and an example of this can be seen in the image of *Ram Perceived* (Figure 8). My peripheral vision quickly sees aspects of a horned animal, ram or otherwise, and natural instinct requires me to react immediately so as to ascertain the need for a response. A correct response may be rewarded with survival, a wrong one with extinction, either way, as our peers inform us, it is better to be safe than sorry.

Figure 8: Richard Hodgetts, *Ram Perceived,* 2014, digital images

Reflecting upon these experiences, it becomes important for me to understand the extent to which this phenomenon affects my visual processing of images and what I inevitably translate into practical outcomes. Understanding how it emerges on so many levels helps to explain more about why and who I have become.

Most interpretations begin at the subconscious level and draw upon stored memories, prior experiences and innate responses. Many past events can be locked away in our subconscious, just waiting for the appropriate catalyst to initiate meaning to a new experience. The observing of the smallest of marks, lines or colour may be enough to inspire the imagination to resolve visual ambiguities. Our perception of reality is built upon many physical and cognitive determinants which are unique to each individual.

The undated statement attributed to Gustave Flaubert: 'There is no truth. There is only perception' (Flaubert) raises my interest in to what is visual reality and is it the same for everyone? The things I see, process and interpret are now brought into question and take on more importance if I am to successfully navigate my environment.

Traditionally the word perception refers to the involvement of the senses in the accumulation and processing of stimuli to arrive at an understanding or concept of 'knowing'. We might also acknowledge that perception includes a more general or metaphoric meaning in our understanding of the world and the meanings we attach to events and feelings.

This highlights a desire for humans to put names and meaning to ambiguous experiences so as to establish a form of understanding or reality: '... the mind needs to find meaning in order to survive and it operates according to what psychologists call the law of simplicity or the law of parsimony, which simply states that best scientific explanation is the simplest one' (Bloomer 1976, p. 15). The mind will draw from a diverse range of senses and experiences to formulate a meaning and response.

Professor Tim Crane references philosopher Martin Heidegger's example concerning context when he states that we rarely actually see or hear each object or sound as separate entities but '…rather, we hear the storm whistling in the chimney, we hear the three-engine airplane, we hear the Mercedes in immediate distinction from the Volkswagen' (Crane 2011).

All our senses may be needed in order to interpret the meaning of a visual experience. The visual image comes with accompanying stimuli which also evoke past experiences to add context and closure. In his painting, *Son of Man* (Figure 9), René Magritte has exploited this process by the unnatural positioning of an apple in a scene to disturb the context one expects, therefore challenging the viewer to reassess their concepts of reality. Pareidolia does a similar thing in the environment, where out-of-context images appear in a landscape, questioning our memories and perceptual organisational frameworks. At times, illusion and hallucination can play a part in these instances.

Figure 9: René Magritte, *Son of Man,* 1946**,**
oil on canvas, 116cm x 89cm
www.renemagritte.org/

Crane suggests that the phenomena of illusion and hallucination raise a traditional problem known as '*the problem of perception'*. He asks, '… if these kinds of error are possible, how can perception be what it intuitively seems to be, a direct and immediate access to reality?' (Crane 2011).

He suggests that maybe perception as we know it is impossible, a paradox or antinomy, incompatible yet compatible. Pareidolia, being a visual component of perception, is not easily categorised and so it may be situated somewhere in this complex area of paradox.

Memory and prior knowledge are also key elements which help to apply meaning to visual experiences. Top-down processing underpins the theory of 'representative realism', also described as a constructive process by British psychologist Richard Gregory (Gregory 2004, pp. 895-896). Representative realism or *'top-down processing'* is a knowledge-based process, requiring contextual information and recognition of patterns to realise perception.

In a paper discussing modern philosophy, Professor William Egginton raises the subject of the questioning of our inherited beliefs when he shares René Descartes's observation that our senses often deceive us and that we cannot know for certain if our perceptions are accurate and can be trusted. Egginton quotes Descartes where he alludes to the many external elements which can affect our perception:

> I will regard the heavens, the air, the earth, colors, shapes, sounds, and all external things as nothing but the bedeviling hoaxes of my dreams, with which he lays snares for my credulity (Egginton 2012).

External and internal elements must play a part in the way we perceive and respond to stimuli. Regarding the works in this project, I must acknowledge that the random choices of materials I use, or shapes I respond to, may not be entirely arbitrary. The relatively new concept of *embodied cognition* sees 'the brain as part of a much greater dynamic system that isn't confined to our cortices'(McKerney 2011). It reasons that the brain can be influenced by other parts of the body and therefore I could be choosing a certain colour because I may be attracted to its sense of warmth, or that I choose a certain brush because it feels comfortable in the hand. The temperature, noise, space, light and other influences existent in a studio may also play a small part in what art I produce.

Consequently, on looking at the whole body of work in this project, I am unable to explain the dominant use of reds and browns in the works, however the repetitious use of figurative elements in the works can be related to regular life drawing experiences. Being more familiar with lines and forms which constitute body shapes, I seem to identify these more readily in ambiguous stimuli. The anatomical forms in *Body 1* and *Body 2* (Figures 10 and 11) acknowledge these life drawing observations which were revealed by linking subtle tone changes or suggestive lines in the paint.

The determinants involved in perceiving can rely predominantly upon what we expect to see, given certain prior experiences, and this is known as '*perceptual set'*. When we are presented with a mixture of ambiguous information, we try to connect the data to make a best-guess decision based upon our knowledge and experience.

Figure 10: Richard Hodgetts, *Body 1*, 2014, acrylic on canvas, 40cm x 80cm

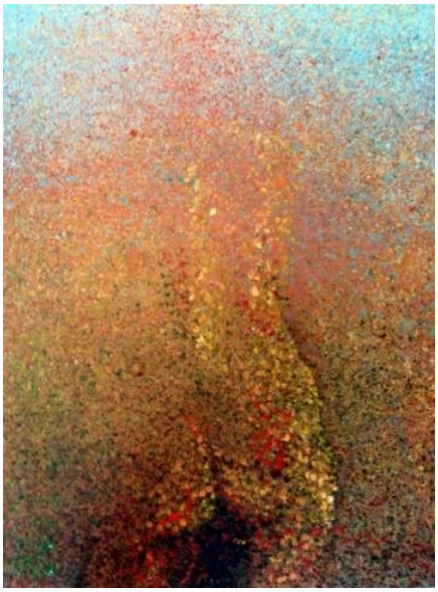

Figure 11: Richard Hodgetts, *Body 2*, 2014, acrylic on canvas, 45cm x 60cm

Also referred to as *expectancy*, perceptual set is a readiness for humans to perceive stimuli according to past experiences and expectations. We learn to negotiate our way through the physical and social environment of our existence by lessons learned through life experiences. This expectation emerges from our prior experiences, cultural factors, emotional state and present context (Grivas, Down & Carter 1999).

Different individual personalities, lifestyles, cultures and environments may also produce variations in perceptions, while the emotional states of individuals can elicit extreme differences of interpretation of the same event, at times creating false perceptions or errors.

In an art context, we can recognise different paintings belonging to different art styles even though we are not familiar with the work. This is because, through experience, we have cognitively organised patterns of data with attached meanings, and these memories are matched and recalled when similarities are perceived.

This pattern recognition is initiated by means of *closure*, a term I use interchangeably with Gestalt practice. Gestalt theory implies that the whole is greater than the sum of its parts. Grouping the parts according to similarity, continuity and proximity allows us to arrive at closure, a version of 'joining the dots'. Visual closure is the ability to recognise an object or shape even if parts of it are incomplete, as pictured in *Dalmatian* (Figure 12).

In my example of *Ram*, I perceived a head and horns of a ram and my mind added the eyes to suggest closure. The mind demands to construct a meaning from the perceived reality, and perceptual set has given it a framework from which to work. When pareidolia occurs, rightly or wrongly, a process of Gestalt closure forms a best fit response.

Figure 12: *Dalmatian*
www.stifmister22001.wordpress.com/2013/06/03/principle-gestalt/

Learning by experience or closure helps us to navigate our way through our environment without having to relearn the spatial properties of objects every time they are encountered. Prior experience and application of best-guess skills comes to the fore, yet I believe an element of inbuilt or hardwired instinctive knowledge plays an important part as well. These actions can be attributed to many unknown factors, but largely by a subconscious interaction with our perceptual set.

The *Rubin Vase* image (Figure 13) is an image often described as a figure-ground illusion which tests our perceptual abilities to recognise a vase or faces. This is where I believe that the word illusion is often used inappropriately. I contend that it should more accurately be described as a perceptual reversal or, at least, a dual reality. It allows two realities to be observed equally, a bistable perception. I see aspects of this concept in my painting, *Body 3* (Figure 14) which could be perceived either as a rock formation or as human torsos. Sometimes it is the way in which we mentally approach or visualise an image which can help to make sense of the ambiguous data. We rely upon our experiences/perceptual set and expectations to formulate closure and understanding of the ambiguous data surrounding us. No two people apprehend an image in the same way, interpretation is subjective and varies with context and personal bias.

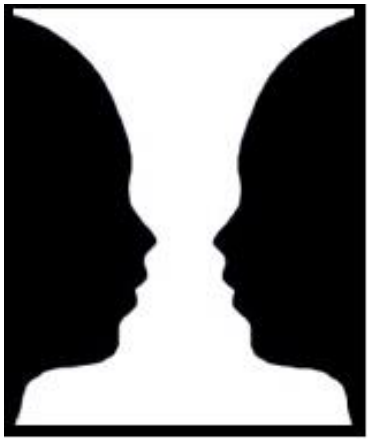

Figure 13: *Rubin Vase* www.carolina.com/teacher-resources/Interactive/optical-Illusions/tr25344.tr.

Figure 14: Richard Hodgetts, *Body 3*, 2014, acrylic on canvas, 60cm x 80cm

The visualisation and interpretation of pareidolian images can be made easier by using different methods of approaching or 'seeing' an image. I have used various visualising techniques and the method to view 'magic eye' or autostereogram images is not unlike how I look at some canvases. Writer Howard Rheingold offers five ways of viewing a stereogram which are variations of two main techniques (Figure 15), the cross-eyed and the parallel models (Rheingold 1994, p. 10).

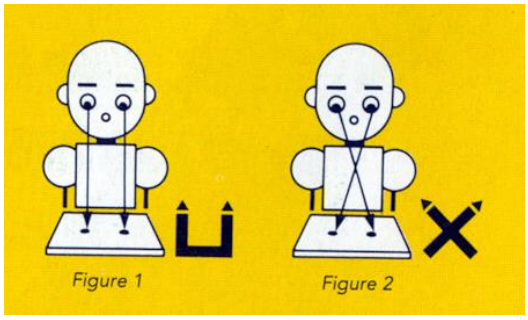

Figure 15: Howard Rheingold, *Viewing Techniques*, 1994

One of my techniques is very close to the parallel method, usually with more of a 'vacant' or relaxed stare. By relaxing the eye and being in a meditative-like state, images often occur in part or whole, or even overlapping. By this method there is no direct fixation on any one point and this allows for significant peripheral vision to intercede, all combining with the brain to resolve closure.

Sarcone and Waeber state that: 'Our brain, in fact, resolves visual ambiguity by means of oscillation' (Waeber 2005, p. 9). Peripheral vision is strong in detecting motion and this can explain my use of it in resolving ambiguous data. While painting an area of canvas, my peripheral vision is always

responding to suggested elements nearby. Rotating the canvas and working from various sides can also add to the images available.

Howard Rheingold believed that cave paintings such as those at Lascaux were the first attempts at 3D imagery, believing they were '…deliberately painted on three-dimensional stone out-croppings; in flickering light these paintings are said to take on a startling, lifelike, 3D quality' (Rheingold 1994, p 6). This use of low light is a stratagem used in the display of my final exhibition. This is intended to stimulate the viewer's peripheral vision in order to detect movement, an unintended element in many paintings.

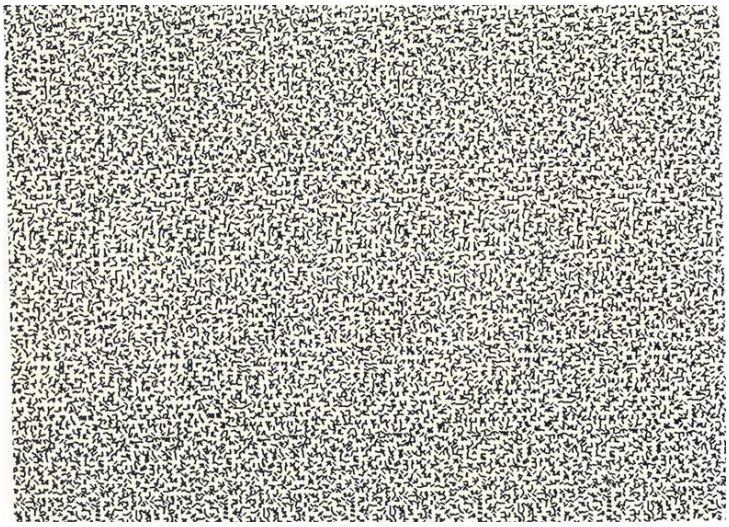

Figure 16: Akira Nishihara, *Untitled*, 1994, Stereogram

The dots in mathematician Akira Nishihara's untitled random dot stereogram (Figure 16) depicts a 3D curved ring shape floating in space and is viewed by using one of Rheingold's viewing techniques. These dots are not unlike the random splatters I use as starting points, however no hidden 3D manipulated images are included although there are ambiguous cues which can suggest identifiable imagery (Figure 17).

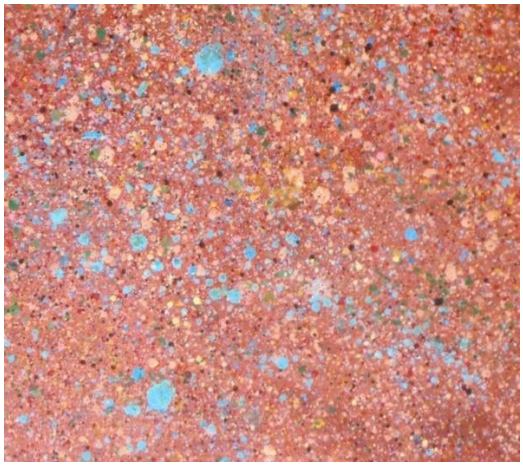

Figure 17: Richard Hodgetts, *Splatter* (detail), 2014, acrylic on canvas

The viewer of my paintings will be rewarded by employing various visualising techniques and this will reveal many seemingly hidden figures. For example, if one was to spend only a few seconds observing *Horse* (Figure 18), they may only see a pinkish canvas and a few darker indistinct shapes. If more time is spent looking, a horse being placed in a lifting sling will emerge. The viewer will become aware that they are engaging in an unspoken dialogue with the artist, through their own experiences and imagination.

Figure 18: Richard Hodgetts, *Horse*, 2015, acrylic on canvas, 40cm x 60cm

Imagination is an essential element of pareidolian experience and involves cognitive processes too complex to be analysed here other than to say that this experience occurs in the 'mind's eye' and seems to disregard many cognitive rules of organisation. Our visual imagination is not a process we often notice using during our waking hours. However, when we recall our overnight dreams we must acknowledge its incomprehensible creative potential.

In recent years, the complexity and originality of the visual architecture in dreams has impressed upon me the potential of the human brain to process imagery and influence imagination.

When we consider the considerable amount of computer memory data required in constructing pixel imagery (architecture) in video games, it is difficult to comprehend what is required of the human brain to construct or project the visual imagery of a dream. It is capable of projecting things, places, people and situations never experienced before and in the most flexible and intricate detail. This processor of infinite power and scope is capable of engaging in many forms of reality. One form of reality which pareidolia may utilise could lie in what Jung and others call 'active imagination' or waking dreams.

Waking dreams occur when a person perceives an image or images while being alert and responsive. By relaxing into a contemplative state and making connections or closure of the stimuli, I seem able to subconsciously merge realistic-type visions over other stimuli. Professor David Mark calls them 'waking lucid dreams … and … spontaneous visual images in therapy sessions have a long history in psychoanalysis' (Mark 2009).

Psychologist Joy Schaverien proposes: 'It is this dream function of active imagination that leads to consideration of it as a means of dreaming whilst awake ... and … The deliberate lowering of consciousness permits images from the unconscious to rise to the surface and, as these emerge, it may be as if the visualized event is actually taking place' (Schaverien 2005, pp. 129-132).

My visualisation techniques, discussed previously, underpin this observation and I believe the dream/imagination processes, as Schaverien identifies, are also integral parts of the pareidolian experience. The Surrealist painters only just touched upon the potentiality of dream-like imagery which digital technology has now progressed almost beyond comprehension.

Ernst Gombrich cites Jean-Étienne Liotard's quote: 'Painting is the most astounding sorceress. She can persuade us through the most evident falsehoods that she is pure Truth' (Gombrich 1977, p. 29). In many ways, the Surrealists were not always seeking to trick our eye as such, but were materialising 'truthful' scenes as perceived from within their imagination. The images we may see in dreams, hallucinations or in our imagination, constitute another form of reality, as we can remember them vividly and we can materialise them in many forms.

Artists draw upon a wide range of inspirations and personal experiences, and often they will look beyond familiar comfort zones to investigate new concepts and materials. We all see the world differently and artists are able to construct tangible examples of their visions and concepts. The works of artists have always been material manifestations of their perceived realities. That is, the work of artists become material realities of their perceived concepts or visions. They can be visual statements which deliver knowledge and may also acquire meaning with each new viewing.

The following chapter examines artists who I believe have utilised pareidolia in various ways, either by accident or through deliberate manipulations to stretch the possibilities that the phenomenon presents. My work crosses over into some of these areas and I discuss some points of similarity or variance as they may apply.

CHAPTER 2: ANTECEDENTS AND PROPONENTS

From earliest times and all corners of the globe, examples of pareidolian art can be found. This project references a select few who have progressed the concept and who have influenced later generations of artists.

Many artists have acknowledged and experimented with pareidolia, whilst others have built upon previous findings and ventured into areas of surrealism, abstraction and illusion, political, religious and social narrative. In the 19th century, there was a growing interest in psychology and this was reflected in the pareidolian-inspired experiments of Victor Hugo, Max Ernst, Justinus Kerner and also in the works of the Surrealists such as Salvador Dali.

One of the earliest examples of pareidolian-inspired art may be an Ice Age carving of an ibis which is situated in a cave named Church Hole, in England's Creswell Crags (Figure 19).

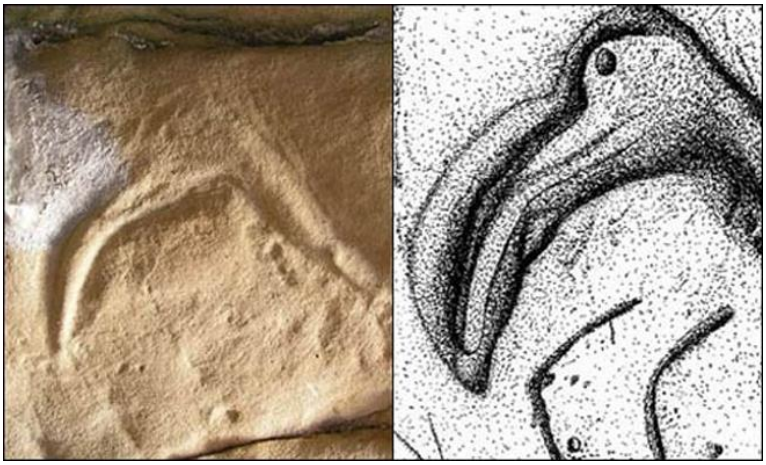

Figure 19: Sistine Chapel 0f the Ice Age, *Ibis*, digital image (BBC 2004)

In reference to the carving, archaeologist Paul Bahn states that: 'One of the most characteristic features of cave art all over Western Europe is the constant use of natural shapes in the rock …' and he noted that the ibis shape actually '… followed the contours in the rock' (BBC 2011a).

Bahn was indicating that the carver had clearly experienced a pareidolian moment by recognising and making closure of the gestalt shapes in the rock. As Rheingold previously alluded to, the three-dimensional qualities of rocks in the Lascaux caves invited further manipulation by cave artists. The flickering light affecting peripheral vision possibly enhanced the presentation of pareidolian images.

By adding ochre to accentuate ibis-like shapes, the carver has created an art process which, more importantly, may be an example of the first steps by primitive humans towards creating art. The ibis carver may also have found shapes which resembled birds or animals and carved into them further. Keeping it for a toy, lucky charm or talisman, the object may have been recognised in that society as a sacred artifact. These symbolic objects may have taken on a whole new persona and become part of a culture's psyche and religious practices.

This process of utilising pareidolia appears to me to be the catalyst for the genesis of art making. This proposal is beyond the scope of this study but does illuminate pareidolia's influence in art making.

The use of symbols has long been used in religious art as evidenced by the recently discovered devil's face (Figure 20) hidden in clouds of a Giotto fresco in the Basilica of St Francis of Assisi . The artist has deliberately imitated a pareidolian experience and positioned it into his narrative for dramatic effect, not unlike the Mantegna painting mentioned previously in Figure 4.

Figure 20: Giotto, *St Francis in Assisi* (detail), 1296–1304 (BBC 2011b)

Sixteenth-century artist, Giuseppe Arcimboldo, would have been conscious of the use of hidden symbols in Renaissance paintings and his work is arguably the most recognised example of pareidolian-influenced painting that exists today, largely because of the volume and the content pertaining to the phenomenon.

A court painter to the Habsburg Court in Vienna, Arcimboldo used pareidolian-inspired objects to construct illusionary portraits, some caustic and some humorous, as displayed by his portrayal of Rudolph II in *Roman God Vertumnus* (Figure 21). Arcimboldo was both acknowledging and utilising

pareidolia and referencing the commonality of shapes which constitute the basic building structures of physical objects. This deliberate manipulation of shapes differs markedly in intent to my process of working more intuitively with shapes, a process also favoured by artist Alexander Cozens.

Figure 21: Giuseppe Arcimboldo, *Roman God Vertumnus,* 1590, oil on panel, 70cm x 58cm *(Sarcone 2009)*

In reprising the investigation of pareidolia, Alexander Cozens (1717–1786) was acknowledging da Vinci's observations, especially in the creation of landscapes. By accident, he made some doodling-type marks: '… happening to have a piece of soiled paper under my hand, and casting my eyes on it slightly, I sketched something like a landscape on it … The stains, though extremely faint, appeared upon revisal to have influenced me, insensibly, in expressing the general appearance of a landscape' (Oppe 1952)

Physics professor Henri Lemaitre is quoted as saying: 'Alexander Cozens's experiments of the 1740s and 50s presaged the art that we would later call "abstract" (Cramer 1997, p. 113). These experiments, emanating from pareidolia, contained an oriental quality and would go on to influence many artists, including the cloud studies of John Constable.

Figure 22: Alexander Cozens, *Blot Landscape,* 1770–1780,
water colour on paper, 167cm x 207cm
www.tate.org.uk/art/artworks/cozens-a-blot-landscape-composition-t08114

Cozens had stumbled on the blot as a quick process to forming landscapes from the shapes he perceived in the ambiguity of inkblots (Figure 22). This simplicity and immediacy was important to Cozens and he urged artists to not add content which was not already suggested by the ink marks, but to keep to the one main element revealed by the blot. 'The blot is not a drawing, but an assemblage of accidental shapes, from which a drawing can be made …' (Oppe 1952, pp. 168-169).

Cozens goes on to make artists aware that it frequently happens that they will be distracted and add a superabundance of design which is more than necessary for a true blot. He also hints that artists may have a preconceived idea of a form and this may tempt them to manipulate their starting point. The decision to leave or further manipulate the original percept varies amongst artists. My primary focus was to subtlety emphasise the original cues as Cozens hints, however in the early phases of this project I was often seduced into fully resolving the perceived figures. Possibly, this reflects the influence of embedded and subconscious patterns of learned behaviours.

Body 4 (Figure 23) illustrates a work with minimal intervention which I completed in minutes by adding a blue wash in the top right-hand corner to delineate the shoulder line on a torso. Less restraint and significant infilling and interpreting of data is evident in the torso of *Body* 5 (Figure 24), highlighting how tempting it is to add detail.

Figure 23: Richard Hodgetts, *Body 4*, 2015, acrylic on canvas, 40cm x 60cm

Figure 24: Richard Hodgetts, *Body 5*, 2015, acrylic on canvas, 70cm x 100cm

The accidental inkblot art form was further progressed when German medical writer and poet Justinus Kerner (1786–1862) accidently dropped ink on some of his papers and became fascinated by the result. Although he did not consider himself an artist, he embarked upon a series of experiments, drawing into the ink to accentuate the figures he perceived.

Figure 25: Justinus Kerner, *Klecksographie*, 1890, ink on paper, www.tate.org.uk/context-comment/articles/deliberate-accident-art

Kerner utilized pareidolian imagery as a source to illustrate subjects in his writings and to inspire new ideas.

Because of the symmetry obtained by folding the blotted paper, Kerner learned he could anticipate bird, butterfly and insect shapes, thus minimising the accidental element of the process. The symmetry obtained in Kerner's images *Klecksographie* (Figure 25) is a method which will often suggest a recognisable shape, usually a face or body. Conversely, by not folding the paper, I found the accidental nature of blots usually eliminates any attempt to pre-empt the outcome but still offered scope to depict various anatomical structures (Figures 26 and 27)).

Kerner's drawings developed into characters which were used to accompany poems he had written and, after his death, the drawings were published with the title *Klecksographien* (1890). The publishing of 'Klecksographien' images fascinated Hermann Rorschach (who was often called 'Klecks'), and he developed the sometimes controversial 'Rorschach Inkblot Test' which was designed to allow psychiatrists to analyse an individual's personality by their responses to ten ambiguous images.

Figure 26: Richard Hodgetts, *Tea Blot*, 2015, tea and pencil on paper, 20cm x 30cm

Figure 27: Richard Hodgetts, *Coffee Blot*, 2015, coffee and pencil on paper, 20cm x 30cm

Living around the same time as Kerner, the French writer Victor Hugo (1808–1885) created many thousands of drawings using puddles of colour, stains, inkblots and rubbings to create an element of fantasy and surrealism (Figure 28).

Figure 28: Victor Hugo, *Octopus*, 1866, pen and ink on paper, 35cm x 25cm
www.tate.org.uk/context-comment/articles/deliberate-accident-art

Hugo was employing his subconscious to elicit a vision from the ambiguous imagery produced in his many experimental art processes. André Breton was later to remark that Hugo possessed 'the means of seizing the vertiginous and of interrogating his own subconscious' (Roberts-Jones 1978, p. 52). Breton's observation of interrogating one's subconscious is important to my understanding of how I perceive images. The technique brings forth the personal idiosyncrasies of the artist which can promote the establishment of a unique and personal artistic style.

Acknowledgement of the pareidolian phenomenon became well established in the early part of the 20th century. Inkblots, rubbings, automatic drawing, frottage, decalcomania and folding were just a few of the techniques being utilised by artists such as Max Ernst, Oscar Dominguez and André Masson.

André Masson (1896–1987) experimented with accidental effects (Figure 29), most noticeably automatic drawing, usually while experiencing starvation, drug use and sleep deprivation, so as to reduce rational thought and to engage his subconscious mind.

Max Ernst (1891–1976) chose to experiment with rubbings or, as he called them, frottage. He would use such items as leaves, textiles, bark, thread and straw to start his frottage and from the resulting structures he would construct new pictorial scenarios such as *Epiphany* (Figure 30).

Roberts-Jones also states that Ernst was influential in progressing the investigation of more surrealist and dreamlike concepts: '… Ernst's birds, forests, fantasies, and dream landscapes opened up a whole universe of suggestion …' (Roberts-Jones 1978, p. 191).

This more surreal manifestation of thoughts and visions brings the viewer closer to the thinking and emotions of the artist. The subconscious element involved in the perception and interpretation of ideas is a key element in forming an artist's unique style. This also challenges the viewer to assess their own subconscious to find some common ground of understanding.

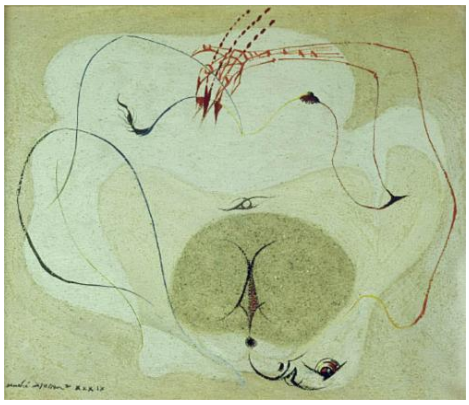

Figure 29: André Masson, *La Terre*, 1939, sand and oil on plywood, 43cm x 53cm www.centrepompidou.fr/cpv/resource/cj754b9/rzAX9G5

Figure 30: Max Ernst, *Epiphany*, 1940, oil painting, www.wikiart.org/en/max-ernst/epiphany-

Many Surrealist artists can be found to have been beneficiaries of pareidolian concepts and Salvador Dali is the most notable example. Salvador Dali was aware of Arcimboldo's work and produced paintings which utilised the concept of perceptual reversal. Using pareidolian imagery which imitate human forms, he sets out to recreate dream-like scenarios, woven together with a duality of realities as seen in *Panoramic Visage* (Figure 31).

Like Arcimboldo, Dali's use of pareidolia is methodically manipulated and moved into the realms of dreams and illusion as referenced in *In Voluptas Mors* (Figure 32), a work made in collaboration with photographer Phillippe Halsman.

Figure 31: Salvador Dali, *Panoramic Visage*, 1935, oil on panel, 18cm x 22cm www.deshow.net/cartoon/salvador-dali-abstract-painting-619.

Figure 32: Salvador Dali, *In Voluptas Mors*, 1951 www.filmsnotdead.com/the-making-of-in-voluptas-mors-salvador-dali-philippe-halsman

In a much more subtle way, Australian painter Russell Drysdale combined surrealist and pareidolian concepts to accentuate the uniqueness he saw in the Australian landscape.

Russell Drysdale's early references to pareidolia emanate from observations he made on his monumental journey throughout drought affected NSW in 1944. On this trip he was appalled at the degradation of the drought-affected landscape and his tree sketches depict and resemble human figures, contorted and distorted in a seemingly agonising fight for survival (Figures 33 and 34).

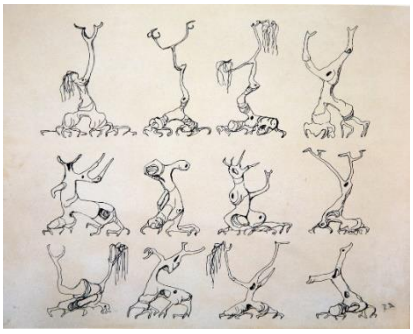

Figure 33: Russell Drysdale, *Drought Sketch*, 1944, pen and ink on paper, 25cm x 27cm http://artsearch.nga.gov.au/Detail.cfm?IRN=167049

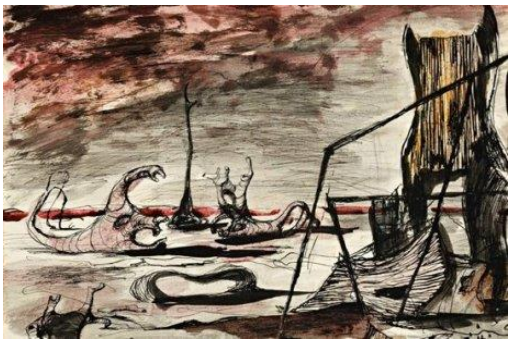

Figure 34: Russell Drysdale, *Drought Series*, 1944, ink wash on paper, 37cm x 44cm http://www.deutscherandhackett.com/auction/16-important-australian-international-fine-art/lot/study-drought-series-1945

With vistas of exaggerated trees and rocks, desolate townscapes and gaunt human figures, his sketches led to a series of paintings which depicted a new vision of the Australian outback. Compared to European landscapes, the idiosyncrasies of the Australian landscape inspired painters to depict a

new vision and understanding of the ancient landscape. Like Drysdale, I have shared similar manifestations of human or animal forms in the rocks and dead gum trees of the Australian environment, as previously referenced in Chapter 1 (Figure 8: *Ram Perceived* and Figure 2: *Eagle Rock Perceived).*

Similarly, in a more surreal and evocative manner, Geoffrey Graham's 1939 painting, *Dreams Beyond Avarice* (Figure 35), displays gesturing trees performing a riotous dance of seduction, possibly referencing the tumultuous patterns and spirit of the Australian environment. Graham and Drysdale are both observing certain features in the landscape taking on human likenesses as if it is one large pareidolian movie set.

Figure 35: Geoffrey Graham, *Dreams Beyond Avarice*, 1939, oil on canvas, 34cm x 44cm (Bruce 2003)

In his etching *Gunnii # 1* (Figure 36), Tasmanian artist Damon Bird allows his tree/human-like forms to weave, contort and gyrate like a living can of worms. The links with pareidolia are distinct and reference the interconnectedness of the environment to the human condition. With a less accidental approach, Bird retains a strong control over his design and composition, using an orchestrated pattern of line and shape to unite his ambiguous figures. This more decorative and stylised way of working recalls a stage I entertained when I used a colour/splatter technique early in the project (Figure 37) but eventually found it at variance with my preference for a more arbitrary and free style.

Figure 36: Damon Bird, *Gunnii #9*, 2012, dry point etching, 115cm x 178cm, http://damonbirdart.blogspot.com.au/2013/07/fremantle-arts-centre-print-award-2013_22.html

Figure 37: Richard Hodgetts, *Diver*, 2015, acrylic on canvas, 60cm x 60cm

Another Tasmanian artist, Damien Baumgartner, has flirted with illusionary and pareidolian-type imagery, not unlike Dali's use of perceptual reversal. His 2004 Glover Art Prize entry *Tiger Scene* (Figure 38), featured a synthesis of landscape and thylacine which utilised shared visual elements to produce an obvious illusion, conceptually portraying the thylacine as an intangible and yet ever-present part of the Tasmanian psyche. The thylacine is not positioned in the landscape but is the landscape, and the landscape is the legend of the thylacine. By using this visual arrangement, Baumgartner can be seen to be questioning our way of perceiving the landscape. We do not see these individual elements such as trees, rocks, and water purely as elements. Metaphoric concepts combine to give meaning and context to a vision of what was and what is. We are relying upon our perceptual set or knowledge of the past to give this scene gravitas.

Figure 38: Damien Baumgartner, *Tiger Scene*, 2004, oil on canvas, 143cm x110cm, www.johnglover.com.au/artists/damien-baumgartner

The three-year project Parallellepipeda: *Between Art and Science* Project (2007–2010) was an interdisciplinary project involving artists and scientists who focused upon the factors that determine aesthetic experience. Appealing to me was the aesthetic symmetry of participating artist Nick Ervinck's monumental digital print *Agrieborz* (Figure 39). This was inspired by his collaboration with surgeon Pierre Delaere who performed a larynx transplant, the larynx having been grafted and carried on a patient's arm over several months prior to the transplant.

Figure 39: Nick Ervinck, *Agrieborz*, 2010, digital print, https://edithdoove.wordpress.com/projects/parallellepipeda/parallellepipeda-images

The image is a smorgasbord of visual colour and 3D elements which pulsate and intertwine, replicating blood vessels and nerve pathways. My interest in Ervinck's image is the appearance of other facial and bodily elements which project themselves to me. Whether intended or not, most evident to me is the open mouth and eyes in the top part of the image surrounded by gesturing arms and gyrating alien beings which wrap around the structure. The visceral elements in this work mirror in part the distorted body shapes appearing in my recent works and more so my photographic experiments with symmetry (Figures 40 and 41).

Figure 40: Richard Hodgetts, *Visceral*, 2014, acrylic on canvas, 30cm x 40cm

Figure 41: Richard Hodgetts, *Symmetry*, 2016, digital image

When summarising the Parallellepipeda experience, project coordinator Johan Wagemans states:

> Visual perception cannot be separated from knowledge, expectations, contexts, feelings, body sensations. As a result of this unique experience of a truly mutual collaboration with artists, my way of perceiving and …experiencing art will be forever more intense, less abstract-rational, and more bodily-emotional—less scientific and more artistic in a sense (Wagemans 2011, p. 672).

Applying closure to gestalt or ambiguous shapes is a key process in experiencing pareidolia and is a key component in the work of the artists discussed. Less abstract than Ervinck, the sculptural works of the Unmask Group present fragments of a larger narrative, inviting the viewer to make closure by linking the negative shapes.

Liu Zhan, Kuang Jun and Tan Tianwei work collaboratively and are known as the Unmask Group. They use predominantly stainless steel and ceramics to construct figurative sculptures which allow negative spaces to become as important as the dynamic positive surfaces of the works.

Capturing a sense of movement, a horse's leg almost disappears into infinity as it seemingly paws the ground, and two figures appear to revolve around each other, meeting or not meeting in swirling embrace (Figures 42 and 43). The works reference the pareidolian process of presenting insufficient information which requires reconstruction in order to obtain meaning and context.

Figure 42: Unmask Group, 2011, *Untitled*, stainless steel, www.mymodernmet.com/profiles/blogs/incomplete-sculptures-of-a-man-and-his-horse

Figure 43: Unmask Group, 2011, *Untitled*, stainless steel, www.mymodernmet.com/profiles/blogs

More direct and not unlike my *Franz Hals* image (Figure 3), multimedia artist Graham Fink references a very direct interpretation of a percept in his 2014 London exhibition, *Nomads*. From many thousands of photographs he has taken throughout the world, Fink has printed facsimiles of recognisable images and likenesses. Fink has observed pareidolian images with a commonality in appearance to those retained in his memory as evidenced in *The Cardinal* and *The Scream* (Figures 44 and 45).

Figure 44: Graham Fink, *The Cardinal*, 2014, digital photograph, www.grahamfink.com/artwork

Figure 45: Graham Fink, *The Scream*, 2014, digital photograph, www.grahamfink.com/artwork

English photographer Carl Warner has also explored commonality in shapes to compose body parts into an illusionary landscape. Like Arcimboldo and Dali, Warner has deliberately orchestrated shapes to produce a synthetic-type landscape where scale and perspective are illusionary (Figure 46). I can recognise comparisons in the ambiguity of scale in my work *Landscape 1* (Figure 47) which coincidently reveals a similar composition but originating from a more accidental approach.

Figure 46: Carl Warner, *Knee Skin Valley*, 2013, digital photograph, www.smithsonianmag.com/science-nature/carl-warners-mountains-are-made-of-elbows-and-knees-2480439/

Figure 47: Richard Hodgetts, *Landscape 1*, 2016, acrylic on board, 20cm x 60cm

A unique translator of the Australian landscape is Latvian immigrant artist, Reinis Zusters (1919–1999), whose Blue Mountain paintings exude distinctive pareidolian influences. Like many refugee

artists arriving in Australia after World War II, Zusters was introduced to a new culture and landscape and particularly to a new aesthetic when exposed to Australian artists such as Drysdale, Tucker, Perceval, Nolan and Boyd.

Using a spatter technique (not unlike my own splatter) he has applied to canvas colours synonymous with those of his environment, the vibrant blues of the sky and mountains, the rustic tones of decaying bush, and earthy tones of ground and gnarly trees. His semi-abstract paintings reveal trees which imitate shapes of distorted birds and animals, or wood and rocks which resemble skeletal remains of ambiguous native fauna being reclaimed by mother earth (Figure 48). Zusters's friend and artist Lloyd Rees was to remark: 'You have not looked at our mountains simply as subjects but have become part of them and they of you' (Zusters 1981, p. 17). Zusters confirms this view when he states: 'Whether exploring ideas of something imagined or searching visually in this magic world of light, colour and shape, I continually clarify and discover more of my own identity and surroundings' (Zusters 1981, p. 23).

Zusters had a unique connection to the landscape and, like Drysdale, the features in the landscape become characters in a narrative inspired by pareidolian observations. The mountains resemble distorted heads, animals, birds and spirit people, and are colourfully intertwined into the landscape (Figure 49). He directly references pareidolia in his self-authored book, *Spiral Visions*, where he presents an interesting drawing of his friend Lloyd Rees opposite a photo of a broken stone resembling Rees (Figures 50 and 51). Rees remarks: 'We are in the presence of an artist who is essaying the very difficult task of combining abstract elements with a visual impression of the world around him' (Zusters 1981, p. 183).

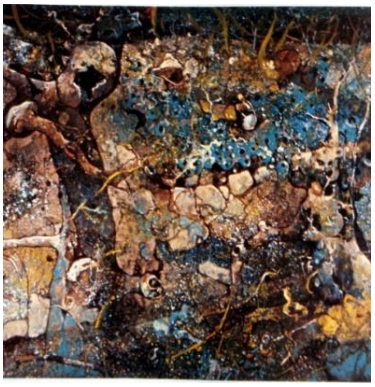

Figure 48: Reinis Zusters, *Jamieson Creek*, 1981, oil on board, 90cm x 121cm

Figure 49: Reinis Zusters, *Eagle Hawk*, 1981, oil on board, 95cm x 100cm

Figure 50: Reinis Zusters, *Untitled Photograph*, 1981 (Zusters 1981)

Figure 51: Reinis Zusters, *Dr Lloyd Rees,*1981, pen on paper, (Zusters 1981)

In comparing my work with the artists discussed, I can often identify common processes and techniques but which often result in quite different outcomes. Visualisation techniques and abilities can never be the same in any two individuals as neural differences can have a bearing on how an image is perceived.

In recent decades the development and exponential growth of technology has provided scientists the facility to investigate the most minute and intricate parts of the human brain and psyche which has brought the arts and sciences closer together, especially in the area of human optics and visual projection.

Margaret Livingstone, Professor of Neurobiology at Harvard, has pioneered much research into the areas of vision and its relationships with artists over time:

> Advances in our understanding of how the brain works have resuscitated interest in linking art with vision science (Conway & Livingstone 2007).

Many artists have suffered from various visual and learning disorders and their visual perspicacity can benefit from this. Margaret Livingstone has identified artists including Wyeth, Hopper, Picasso, Chagall, Rauschenberg, Johns, Close and Rembrandt who suffered from varying degrees of stereo blindness which causes difficulties in depth perception and which she suggests can go some way into understanding the visual elements in their paintings. Chuck Close, who is also dyslexic, remarked: 'Almost every decision I've made as an artist is an outcome of my particular learning disorders' (Livingstone 2002, p. 201).

The disorders that affect artists may also demand that the brain develop other pathways and processes which deliver extraordinary powers of perception or insight. As an example, blind people are now learning to ‘see’ by using echolocation and this illustrates that other senses can have significance in other cognitive areas.

Experiencing pareidolian imagery may not be symptomatic of a cognitive or visual disorder but it does reveal a process of perception which can be exploited in the creative arts. I have become more examining of factors involved in *embodied cognition* where they may influence my work. I know that mood music inspires my creative drive and I suspect my rural upbringing encourages the use of an earth coloured palette. The project has inspired me to be more inquiring of my early childhood experiences, which, as part of my perceptual set, have subconsciously led me to making choices on matters affecting artistic decisions. By looking back on life experiences and influences, I can better appreciate and gage future developments in my artistic practice.

The following chapter looks closely at how I perceived the images produced in the project and gives pictorial evidence and discussion of the three distinct phases of the painting process.

CHAPTER 3: METHODS AND WORKS

In my journey to negotiate the enigma that is pareidolia I made a conscious decision that at no time during the project did I want to be consciously influenced by any artist or their techniques. I wanted to be largely directed by what I identify as pareidolian processes. I deemed it important to allow processes like perceptual set, closure, embodied cognition, subconscious thinking, and any relevant innate mechanisms to dominate my responses to ambiguous stimuli. For that reason also, all titles given to the works are for descriptive purposes only and are not indicative of any pre-planned intent.

This chapter describes how the paintings in this project were created, along with references to my earlier paintings and practices. As the paintings developed over the length of the project, three major phases became evident, albeit with some crossovers.

Phase 1 contains paintings which were inspired by pareidolian stimuli on randomly prepared or natural surfaces. Considerable embellishment was made to the original stimuli in an effort to fully realise the perceived shape, but in so doing the initial cues were often lost to the viewer.

Phase 2 contains the bulk of the works and shows the trend away from the strict depiction of figures to much more use of ambiguous shapes and spaces. This directed the viewer away from the more figurative imagery and encouraged them to observe their own pareidolias.

Phase 3 explored the more ephemeral and nebulous building blocks of shapes, progressively ignoring recognisable figures being perceived. More focus was put on the patterns emanating from within the structures of potential shapes. Ironically, this process almost took the painting back full circle to Leonardo's observations, a presentation of ambiguous stimuli.

Background

The works in this project resulted in a considerable departure from my previous way of approaching painting. My painting technique up until this research began was dominated by the use of traditional rules of composition where I employed learned concepts/skills to construct content around a preconceived narrative (Figure 52). Conversely, to explore pareidolia creatively, the idea of rejecting a structured approach was both logical and necessary but was also considerably difficult to apply as a desire for cohesion was still desired. The process entailed giving over all control of content and aesthetic consideration to a more fortuitous process which gave no guarantee of a resolved or

successful outcome. Any planned use of content, scale or compositional elements was totally disregarded to maintain authenticity of intent. The unpredictability of the methods used in the painting process allowed for a diverse range of styles and imagery to appear. The relinquishment of compositional control, although initially uncomfortable, opened up a complete new way of visualising and interpreting my environment.

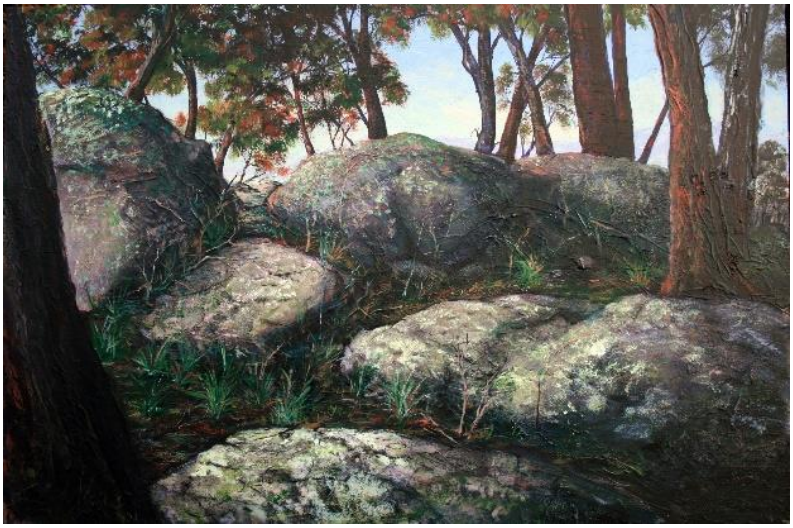

Figure 52: Richard Hodgetts, *Currawong*, 2012, acrylic on board, 60cm x 90cm

I have always been aware of pareidolian imagery and I have to look back into my childhood to find the source of my interest in such intriguing imagery. As a child, apart from a predilection to draw, I must acknowledge that a unique individual was a major influence in guiding my creative thinking processes.

In 1959, Australian children's television was invigorated by a program presented by artist and puppeteer Norman Hetherington, who introduced his marionette creation, Mr Squiggle (Figure 53). Hetherington created drawings from ambiguous squiggles which were sent in by viewers. The viewer was unknowingly viewing the upside down version as Hetherington drew from above and it became a challenge to visualise the finished image before it was revealed.

Mr Squiggle (Hetherington) taught children to see things differently, or to look outside the square as is the modern term. Possibly, Mr Squiggle's challenge to decipher ambiguous lines and my enquiring artist's eye has enhanced my ability to 'join the dots' of pareidolian stimuli.

Figure 53: Mr Squiggle & Norman Hetherington,
https://alchetron.com/Norman-Hetherington-1018316-W

Not unlike Cozens and Kerner, my journey started purely by chance when I began to see images and vistas appearing within the splatter preparation layer of a painting. The more I looked at the canvas, the more the vistas appeared, much like apparitions in a waking dream. Suddenly I was seeing a myriad of images appearing on the canvas, vistas suggesting landscapes, figures, animals, birds and other shapes. From that revelation I then resolved to develop the imagery from the raw information emerging from the randomly applied base layer of paint. Rather than manipulating the paint to develop content, the paint now revealed the content to me.

Robert Solo, in the preface to his book *Cognition and the Visual Arts*, quotes the great artist Michelangelo, who refers to the form that lies within:

> Even the finest artist has no idea that the block
> Does not itself constrain beneath its surface;
> To release that form is all that hand can achieve,
> The hand that is obedient to the intellect. (Solo 1997)

I believe that Michelangelo is talking about letting the materials reveal their hidden attributes, suggesting that the artist needs to recognise and reveal what lies beneath the surface and not rely upon skill alone to create the work. My chance encounter of 'seeing' images within the painting surface now opened up a liberating way of exploring the more subconscious aspects of perception and artistic interpretation.

The medium chosen for this project was paint on canvas and I had to prepare a surface which largely resembled the ambiguous stimuli Leonardo had observed in his stained walls and ranges of stones.

The start of the painting process involves creating a surface texture or pattern which is as random as possible so as not to consciously impose or suggest any imagery, figures or recognisable shapes. As the concept of embodied cognition alludes to, there is always going to be some subconscious intrusion simply by the act of making a choice.

The two main techniques I chose were a coloured splatter/stipple application and a basic tonal wash technique (Figures 54 and 55). Although I experimented with other techniques, these two provided ample scope and access to pareidolian imagery.

Figure 54: Richard Hodgetts, *Splatter*, 2014, acrylic on canvas, 40cm x 60cm

Figure 55: Richard Hodgetts, *Wash*, 2014, acrylic on canvas, 40cm x 60cm

With the washes, random marks were achieved by brushing the wet paint with rags, brushes or anything else at hand, then spraying with water to further undermine conscious mark making. The splatter process was achieved by flicking random colours on the canvas with a brush flicked through the fingers.

After the surface had been prepared, the work was viewed over different periods of time using the visualising techniques discussed earlier. One important rule I set to follow was that the pareidolian image must be viewable after multiple visits, reassuring me that the image is 'real'.

Phase 1

The painting *Landscape 2* (Figure 56) displays the first example of a pareidolian-inspired landscape, and it was achieved by visually joining dots and lines in the splatter to reveal forms and shapes. The paintings developed around the content suggested in the splatter and were not yet devoid of formal composition or embellishment.

Figure 56: Richard Hodgetts, *Landscape 2*, 2014, acrylic on canvas, 45cm x 60cm

After some early exploratory works on wood slabs I returned to painting on canvas, again using the splatter technique to simulate natural textures such as rocks. At times, very diverse content appeared which I pursued although the paintings seemed not to be cohesive or appealing to me. Some works were realistic in parts and others were highly decorative and pattern-like (Figures 57 and 58). The five people in *Queue* were perceived as outlines of figures and then 'dressed' according to my perception of their character. A sixth individual was left untouched as an example of how some figures can appear without embellishment.

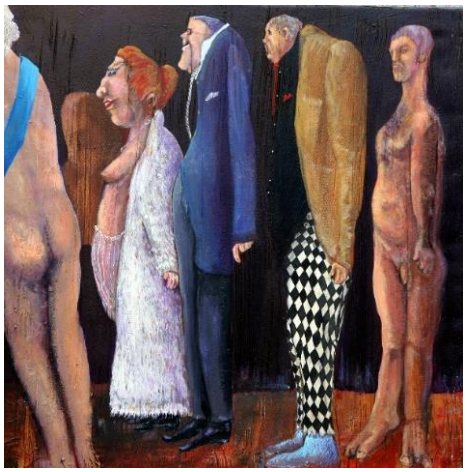

Figure 57: Richard Hodgetts, *Queue*, 2015, acrylic on canvas, 60cm x 60cm

Figure 58: Richard Hodgetts, *Stoned*, 2015, acrylic on canvas, 40cm x 50 cm

In the case of the decorative paintings *Fish* and *Chooks* (Figures 59 and 60), slight variations in tone, line and colour indicated shapes and suggested closure, which I then enhanced with decorative lines and patterns. Recognising the clues in the paint surface was not unlike following faint animal tracks

through grass or in sand. An innate process of recognising patterns and shapes seemed to be natural and inevitable. Elements of aesthetic and compositional control were unplanned but still evident.

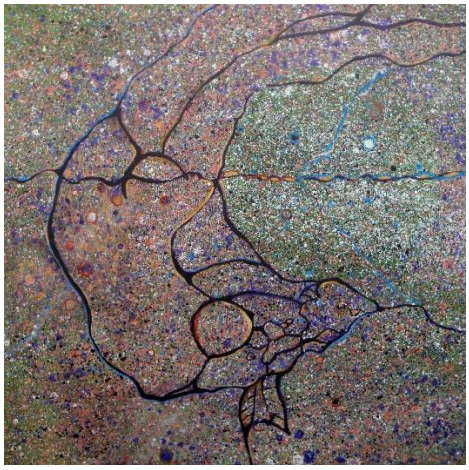

Figure 59: Richard Hodgetts, *Fish*, 2015, acrylic on canvas, 60cm x 60cm

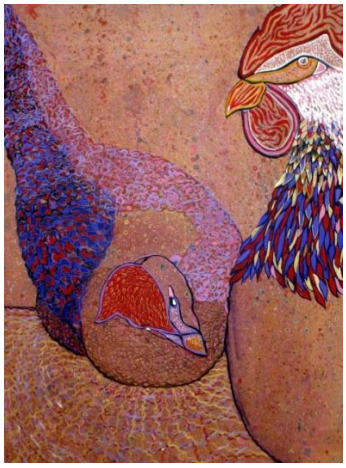

Figure 60: Richard Hodgetts, *Chooks*, 2015, acrylic on canvas, 45cm x 60 cm

The paintings in this first phase illustrate a completed version of the percept but the additional manipulation of the cues have obscured the shape originally envisaged. Progressively I began to lean towards using more of the wash technique which seemed to allow for a more cohesive and intuitive style (Figures 61 and 62)).

Figure 61: Richard Hodgetts, *3782*, 2015, acrylic on canvas, 80cm x 100cm

Figure 62: Richard Hodgetts, *3715*, 2015, acrylic on canvas, 40cm x 40cm

Phase 2

The use of washes allowed a looseness and more intuitive way of covering the canvas, often leaving areas unworked and less refined than the splatter style. The word ambiguity was continually cropping up in discussions and it was thought that less completion of the cues in the works would create intrigue and would invite more viewer engagement.

A recent study found that 'ambiguity is an important determinant of aesthetic appreciation and … that art is able to elicit special experiences, such as the enjoyment of ambiguity when viewers perceive and attempt to understand artworks' (Jakesch & Leder 2009). The ambiguity now emerging allowed more involvement of the viewer without taking away from my perceived images. Return visits to the canvas also revealed additional imagery not perceived previously and gave a sense of renewal.

Progressively I began to ignore the big picture shapes and sought out the more ambiguous and elusive images which were more suggestive and abstract. The process became more intuitive and largely unstructured and small edges of canvas were left unworked and allowed the work to flow off the edge. By example, the figurative shapes in *Torso 1* and *Faces* (Figures 63 and 64) became more segmented and visceral, the pattern in the surface tissue more fragmented. The composition of the picture elements become less important and content became less defined.

Figure 63: Richard Hodgetts, *Torso 1*, 2015, acrylic on canvas, 50cm x 70cm

Figure 64: Richard Hodgetts, *Faces*, 2015, acrylic on canvas, 45cm x 60cm

Each canvas evolved separately from each other and, because of the random and intuitive process of the preparation, it became impossible to replicate content or effects. At this point it may be helpful to follow the progress of two paintings so as to make some sense of the processes.

Michelangelo (Figure 65) and *Old Woman* (Figures 66 and 67) record the progression of two paintings and my interpretation of the pareidolian cues contained within them. The canvases were prepared using a sepia/earth colour wash before being brushed and sprayed as previously described.

Diary of a Painting: *Michelangelo*.

Usually the application of colour and texture is largely impulsive. The process used the first colour or applicator at hand, although, as previously stated, *embodied cognition* may have a bearing on the choices of materials made at this stage.

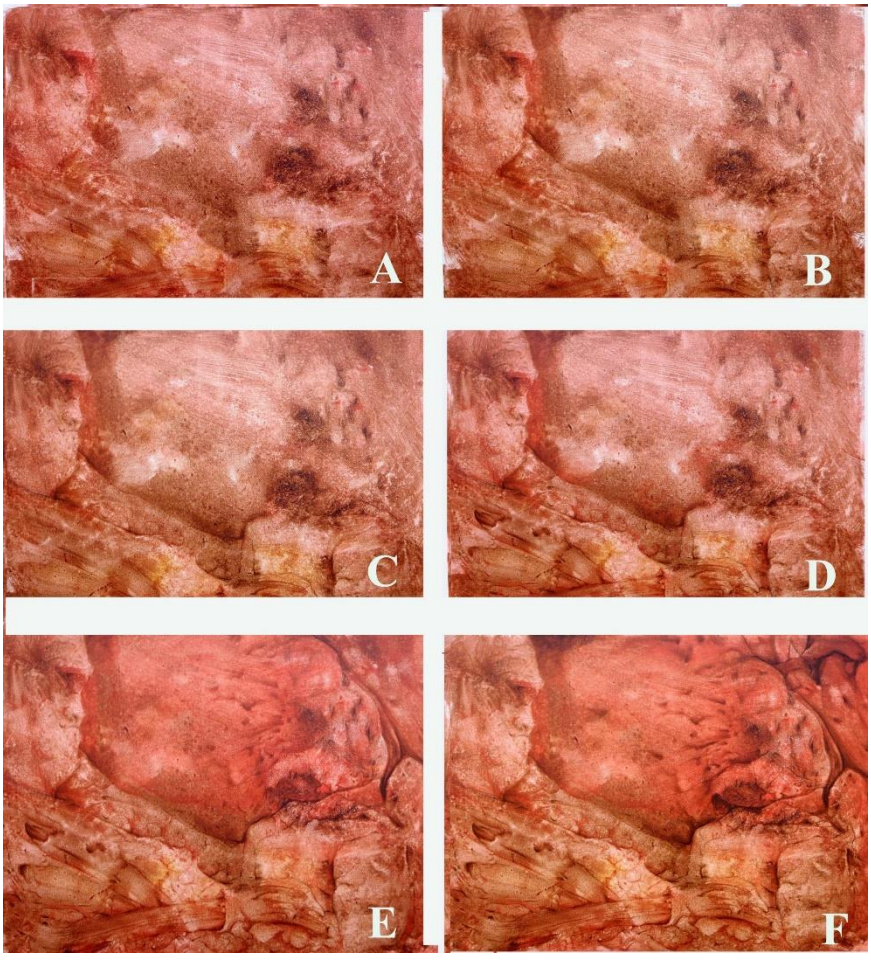

Figure 65: Richard Hodgetts, *Michelangelo (*progression*)*, 2015, acrylic on canvas, 45cm x 60cm

Figure A shows part forms already emerging in the initial wash. Instantly a face (not unlike the face in *Queue*) is observed looking downwards and a skeletal arm shape at bottom left reaches outwards to the right. There are other shapes which may be observable by others, but again, perceptual set and personal bias is responsible in perceiving these.

It is at this point that I start to tease out the forms more aggressively by accentuating the darks and shadows against the whites. As the process evolves, various shapes are ignored or included depending upon what is deemed to be aesthetically pleasing and in keeping with an evolving theme. Often the canvas is rotated and worked from different sides, revealing a multiplicity of content.

By viewing the series of figures A to E, it can be seen how various shapes are perceived and developed, ignoring some and leaving others to be perceived by the viewer. Interestingly, on a return to the canvas after a period of time, new imagery can be perceived and the viewing process becomes an experience of renewal.

Diary of a Painting: Phase 2, *Old Woman*

The painting of an old woman follows the same process as the previous example, using simple washes of brown and black pigment, over-sprayed with water to avoid conscious mark making. Initially the face of the woman was perceived along with the back of an infant. It is possible that subconscious processes directed me to instinctively observe figures that were synonymous with a family group, ignoring figures which seemed to be out of context.

Throughout this project it became normal to be presented with multiple choices of shapes, many of which I chose to ignore so as to retain some sense of cohesion. Although not a conscious decision, ingrained and automatic organisation of content conforming to learned art norms still remained evident in the creative process.

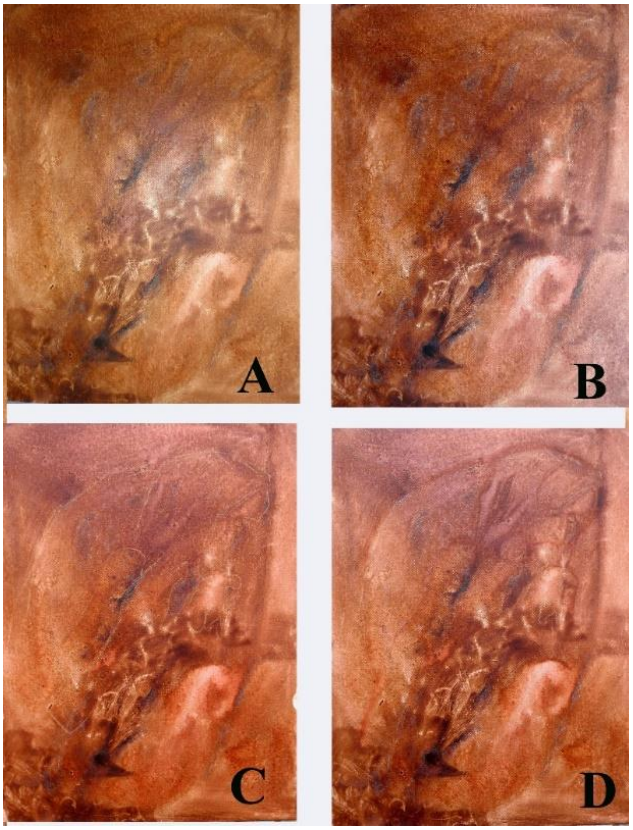

Figure 66: Richard Hodgetts, *Old Woman* (progression), 2015

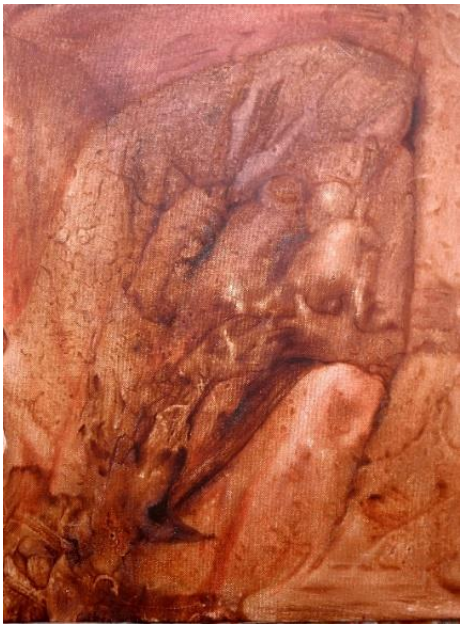

Figure 67: Richard Hodgetts, *Old Woman*, 2015,

acrylic on canvas, 45cm x 60cm

Progressively, the imagery in the paintings started to become more surreal and fragmented, involving a more ambiguous narrative, emphasised by a distortion in scale and form. I began to become more interested in the smaller detail of shapes observable in the watery patterns. The anatomical layers of the figures became more prominent, often peeling away the surface tissue to expose underlying structures. A recognition and interpretation of the structural shapes and patterns which constitute figurative forms now became more of a focus in the third and final phase of the project.

Phase 3

Although it was envisaged that a move away from a figurative focus would produce less recognisable shapes, it eventuated that body parts still emerged. Subconscious processes seemed unable to completely ignore the human element. These shapes emerged by observing the out-of-context variances within the random patterns and linking them up by accentuating them with lines or washes.

As if to endorse the concept of embodied cognition I began to only feel comfortable using an earth-coloured palette which introduced a small change in the character of the works. With their minimal use of ochres of black, white, yellows and reds, early cave paintings have always inspired me for their simplicity and immediacy and I began to recognise some similarities occurring in my work. They exude freshness and a directness in their narrative, unencumbered by any overemployment of materials and marks.

Historian Giorgio Vasari held Michelangelo's brief drawings in high regard: 'Many painters achieve in the first sketch of their work, as though guided by a sort of fire of inspiration … a certain amount of boldness; but afterwards, in finishing it, the boldness vanishes' (Vasari 1996). The immediacy and freshness in palette holds true in cave paintings and I believe a subconscious bias was responsible for my use of a similar colour palette in these final works.

Ironically, emphasising the small shapes and tonal variances in the washes has often led to the creation of unintentional detail. This then is at variance with Michelangelo's concept of 'non finito' and also with my aspiration to keep content and style simple and fresh. Paradoxically the paintings seem to work both ways, the modest shapes and marks combine to form intricate patterns, and the narrative becomes both minimalistic and multifaceted.

Figure 68: Richard Hodgetts, *Big Pink*, 2016, acrylic on canvas,

120cm x 120cm

In the painting *Big Pink* (Figure 68), what seems to be a very detailed image is actually an exploration and manipulation of a few simple shapes. The groups of interconnected forms are based upon a variation of basic cylindrical structures. They bend, warp, curve, join, wrap, flatten and generally weave in and out of other geometrical entities. Holes and crevasses both join and separate these shapes, adding to or taking away from larger structures which in themselves can be perceived as recognisable images.

Throughout the painting of this work, I resisted the temptation to emphasise the more obvious human body parts which were constantly visualised, although I allowed some subtle evidence of these to remain. The conclusion arrived at by the viewer will undoubtedly underpin the notion that we all want to make meaning of everything we see.

The painting entitled *Cave* (Figure 69) was one of the last works in this project, and without any intent on my part, took on the resemblance of a cave-like painting. Like the Church Hole carver, I have recognised random lines that reminded me of an animal and have accentuated those suggestive marks. In this case, two antelope heads appear and then disappear back into the confusion of rock-like structures. For early cultures this kind of image may have represented a way of paying homage to a

deity that provides food for that society. Not unlike the sacred cows of India, animals can take on religious significance and so, by experiencing a pareidolian moment in a cave, the image gains a place of importance in our psyche.

Figure 69: Richard Hodgetts, *Cave*, 2016, acrylic on canvas, 120cm x 120cm

Reviewing the entire body of work has revealed a continued but unplanned emphasis with figurative forms and gestures. The early works were obviously pictorial and concentrated on realising the perceived content in a very traditional manner, leaving little for the viewer to engage with. This phase reflected the difficulty in detaching from an ingrained and controlled figurative style of art making, to allowing fortuity to play a more direct role in the creative approach. The works became more stylised as they progressed, presumably because of a response to the colourful splatter technique in the preparation.

Midway through the project, a marked change came about with the extended use of sepia washes and the decision to desist from developing fully the figurative shapes. This allowed elements of the canvas to contain more ambiguous stimuli with which to engage the viewer. The palette evolved to using

earthier colours, with browns and reds dominating. The preparation of the canvas surface became increasingly random and fortuitous and a more free appearance evolved. In various degrees the figurative element remained, reaffirming to me that an innate process was responding to both a personal perceptual set and a reference to survival/face recognition impulses.

Reviewing the works in their entirety has revealed patterns in my subconscious thinking and preference for the figurative. Although aesthetics were of minor consideration in the making of the works, some element of aesthetic judgement will be made in hanging the final exhibition. Selection, lighting and presentation will be based upon innate considerations to reference embodied cognition and may employ combinations of past and present knowledge and values. This is appropriate as it acknowledges the subconscious processes employed in the making of the works.

Comparing the three main phases reveals a figurative to abstract path being taken and an almost full circle return to the ambiguous patterns as presented in figures 54 and 55. Figure 68 is very reminiscent of figure 54 which exemplifies the preparation of a canvas, designed to produce a neutral and ambiguous starting point to a painting. It also references again, da Vinci's spotted and stained walls which provide food for our imagination.

Finally, it is worth reminding ourselves of Sarcone's caution that it is illusionary thinking to believe an image has only one interpretation. It may also be beneficial to look within our subconscious and allow our imagination to play a bigger part in our visualisation of the visual world.

CONCLUSION

The primary aim of the project was to create an exhibition which examines, by practical means, the challenges of interpreting pareidolian patterns, thereby gaining a more definitive understanding of the interpretative processes involved in visual perception. I argue that defining visual reality is problematic and our individual processes of perception contribute to a fluid and multidimensional state of visual actuality.

I have argued that perception and interpretation of ambiguous images can be influenced by many unique factors and elements. Complex cognitive processes such as perceptual set, closure, embodied cognition, pattern recognition and innate survival instincts are critical factors which combine to influence visual perception.

The acknowledgement of these complex processes informs and explains the decision making of this interpretative phase of the works which progressively evolves from a figurative construal to an abstracted elucidation of the data. Also acknowledged are occasional contradictions of the stated aims and intent of the project regarding simplicity and excess manipulation where, subconsciously, entrenched processes within my perceptual set had some influence on early works. This referenced the difficulties in approaching artmaking from an instinctive or intuitive model when more routinely comfortable with a traditional and learned one.

The strengths of the exhibited works ultimately demonstrate that visual perception can be both subjective and imaginative in interpretation, resulting in creatively diverse interactions between artist and viewer. The viewer approaches the exhibition space with both conscious and subconscious expectations which have been defined by their unique perceptual set. The varying degrees of ambiguity in the works challenges the viewer to attempt visual closure to gain understanding. Recognising their own cognitive biases allows the viewer to explore the elasticity of visual perception and engage in the imaginative potentiality of visual interpretation.

In this project I set out to explore the phenomenon of pareidolia and allow the ambiguous stimuli to evolve from the canvas without undue manipulation or formal design. The immediacy and rawness of the stimuli was a motivating factor which was initially lost in the early paintings of phase 1. On reflection, these paintings sought to resolve all that appeared and therefore left no ambiguity or interest

for the viewer. Phase 2 started to eliminate areas of overworking images and allowed figures to remain incomplete and therefore enticingly confusing to the viewer. Phase 3 achieved more of what I had found exciting about pareidolia in that my visions could be retained and still be interpreted quite differently by others. The paintings therefore did not need to be resolved in the traditional sense. It now became more important to entice the viewer into the works but also to allow the viewer's imagination be engaged in areas left unresolved.

The paintings also took on a metamorphosis like appearance, as the subtle marks and lines appear to flicker and change when viewed at different times. Whole new vistas could emerge again, referencing da Vinci's observations of how the imagination could be excited to reconstruct vistas and scenes from ambiguous stimuli.

Pareidolia is but one element that challenges our imagination to connect scores of cognitive processes to give meaning to our visual world. It also upholds da Vinci's recognition to the potential of imaginative inquiry which ultimately asks us to question the validity of what we perceive.

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